

IN THE CLAIMS:

Claim1 (currently amended) A process for the preparation of a polypropylene polymer composition with bimodal rubber, said process comprising the steps of:

- i) feeding propylene to a at least one slurry reactor and producing a polypropylene polymer matrix in the presence of a ~~polymerisation~~ polymerization catalyst in said at least one slurry reactor,
- ii) transferring the slurry reactor product into a gas phase reactor (GPR),
- iii) feeding a first mixture of ethylene and propylene to said first gas phase reactor and producing a first ethylene/propylene-copolymer in the polymer matrix in the presence of a ~~polymerisation~~ polymerization catalyst in said first gas phase reactor,
- iv) transferring the first gas phase reactor product into a second gas phase reactor, and
- v) feeding a second mixture of ethylene and propylene to said second gas phase reactor and producing a second ethylene/propylene-copolymer in the polymer matrix in the presence of a ~~polymerisation~~ polymerization catalyst in said second gas phase reactor, and

vi) recovering the polymer product produced in step v)
for further processing,
wherein said first and second ethylene/propylene
mixtures having different composition ratios and
wherein said first ethylene/propylene-copolymer has a
higher molecular weight than said second
ethylene/propylene-copolymer.

Claim 2 (currently amended) ~~Process according to~~ The process of claim 1, wherein
the composition ratios of said first and second
ethylene/propylene mixtures are adjusted so that in the
first gas phase reactor, a propylene rich ethylene
propylene rubber (EPR) ~~rubber~~ is produced in the
propylene polymer matrix, and in the second gas phase
reactor, a an ethylene rich EPR rubber is produced in
the propylene polymer matrix.

Claim 3 (currently amended) ~~Process according to any of claims 1 or 2~~ The process
of claim 1, whereby the ~~polymerisation~~ polymerization
conditions in the gas phase reactors are such that in one
GPR reactor A, the gas phase ~~polymerisation~~
polymerization step is carried out by adding propylene
and ethylene monomers where the resulting amount of
C₂ in the EPR formed in gas phase reactor A is in the

range from 39 – 74 mol%, ~~preferably 53—65 mol%~~ and that in the other GPR reactor B, the gas phase ~~polymerisation~~ polymerization step is carried out by adding propylene and ethylene monomers where the resulting amount of C₂ in the EPR formed in gas phase reactor B is in the range from ~~77—99,9 mol%~~, ~~preferably 84—96 mol%~~ 77 – 99.9mol% .

Claim 4 (currently amended) ~~Process according to~~ The process of claim 3, whereby in GPR reactor A, the molar H₂/C₂ ratio is in the range between ~~0,01 to 0,1~~ 0.01 to 0.1, ~~preferably 0,03 to 0,06~~ and ~~most preferably 0,05~~ and in GPR reactor B, the molar H₂/C₂ ratio is in the range between ~~0,3 to 0,7~~, 0.3 to 0.7 ~~preferably 0,4 to 0,6 and most preferably 0,5~~.

Claim 5 (currently amended) ~~Process according to any of the preceding claims~~ The process of claim 1, whereby the polymer products are flashed before transferring them to the next ~~polymerisation~~ polymerization step.

Claim 6 (currently amended) ~~Process any of the preceding claims~~ The process of claim 1, whereby the first and second GPR ~~polymerisation~~ polymerization steps are carried out in the same gas phase reactor.

Claim 7 (currently amended) ~~Process according to any of the preceding claims~~ The process of claim 1, whereby the polymer product obtained in step vi is further treated for compounding with additives and/or fillers.

Claim 8 (currently amended) ~~Polymer~~ The polymer product ~~obtainable~~ obtained according to the process of ~~any of the preceding claims~~ claim 1.

Claim 9 (currently amended) ~~Polymer~~ The polymer product ~~according to~~ of claim 8, further comprising at least one additive or filler selected from minerals, slip agent and processing agents.

Claim 10 (currently amended) ~~Polymer~~ The polymer product ~~obtainable~~ obtained according to the process of ~~any of the preceding claims~~ claim 1 and having a dL value of less than 4, ~~preferably less than 2.~~

Claim 11 (currently amended) Use of the polymer of ~~claims 8 to 10~~ claim 8 for manufacturing ~~moulded~~ molded articles.

Claim 12 (currently amended) ~~Moulded~~ A molded article[,] comprising the polymer of ~~any of claims 8 to 10~~ claim 8.

- Claim 13 (new) The process of claim 3, wherein the resulting amount of C_2 in the EPR formed in gas phase reactor A is in the range from 53 – 65 mol%.
- Claim 14 (new) The process of claim 3, wherein the resulting amount of C_2 in the EPR formed in gas phase reactor B is in the range from 84 – 96 mol%.
- Claim 15 (new) The process of claim 3, whereby in GPR reactor A, the molar H_2/C_2 ratio is in the range between 0.03 to 0.06.
- Claim 16 (new) The process of claim 3, whereby in GPR reactor A, the molar H_2/C_2 ratio is 0.05.
- Claim 17 (new) The process of claim 3, whereby in GPR reactor B, the molar H_2/C_2 ratio is in the range between 0.4 to 0.6.
- Claim 18 (new) The process of claim 3, whereby in GPR reactor B, the molar H_2/C_2 ratio is 0.5.
- Claim 19 (new) The polymer product of claim 10 having a dL value of less than 2.

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| Claim 20 (new) | Use of the polymer of claim 9 for manufacturing molded articles. |
| Claim 21 (new) | Use of the polymer of claim 10 for manufacturing molded articles. |
| Claim 22 (new) | Use of the polymer of claim 19 for manufacturing molded articles. |
| Claim 23 (new) | A molded article comprising the polymer of claim 9. |
| Claim 24 (new) | A molded article comprising the polymer of claim 10. |
| Claim 25 (new) | A molded article comprising the polymer of claim 19. |